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VuFind: A Next-Gen Catalog from Villanova

Smart Libraries Newsletter

Smart Libraries Newsletter delivers hard data and innovative insights about the world of library technology, every month.

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VuFind: A Next-Gen Catalog from Villanova

A constant theme in the current phase of the evolution of library automation involves the widespread perception that catalog interfaces must improve. The online catalogs delivered with many of the ILS products fall short of what's needed in this era of Web savvy library users. This emphasis on new interfaces currently drives the development agenda of many of the commercial companies involved in library automation. But these commercial vendors are not alone. Libraries themselves have joined the fray, devoting their own efforts toward products developed in the open source model.

In this vein, a team at the Falvey Memorial Library at Villanova University is developing a next-generation library search interface called VuFind. Currently in the beta stage of development, VuFind embodies many of the features expected in next generation catalogs. The library plans a production release of the software by November 2007.

VuFind's Capabilities and Scope

Villanova offers a demonstration website for VuFind that shows off the application's current capabilities. Features implemented so far include the presentation of search results in relevancy-ranked order, presentation of facets for narrowing a result set, display of the current status and availability of items, offering suggestions for related items, display of book jacket images, and the ability for users to contribute tags and comments. Ongoing development continues. Some of the planned upcoming features include improvements to existing functionality as well as new features such as the ability to narrow results by call number subject areas, to place holds and recalls directly through VuFind, usage reports and statistics, grouping of similar items by edition, and a Web-based administration console.

One of the key goals of VuFind involves providing an interface to search and browse through a wide variety of library resources. In addition to data from the ILS, a library might also want to load records from other sources, such as local digital collections and their institutional repository. VuFind fits well within the trend to expand the scope of the library search interface well beyond the traditional ILS.

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An Open Source Product

VuFind was released as an open source product on June 20, 2007 to SourceForge. The terms of the GPL (GNU General Public License) allow others to freely download and make use the software and to participate in its development, fixing bugs and extending its features, provided those changes are also contributed as open source.

VuFind makes use of a number of open source components. The search features of VuFind rely on Solr, a search engine that has gained tremendous popularity since its open source release in January 2006. Solr delivers an integrated suite of search services based on Lucene, a lower-level open source search engine. Solr and Lucene both fall within the Apache Software Foundation family of open source technical infrastructure components. Other components that comprise the application include the Java Development Kit, Apache Web server, the PHP scripting language, the MySQL rela-tional database management system, the YAZ Z39.50 toolkit, and the GNU Aspell library of spell check functions.

VuFind has been designed to work in conjunction with any ILS. The initial version works with Villanova University's Ex Libris Voyager system. A component of the system called the Catalog Driver functions to extract holdings and status information at the point of inquiry. Libraries interested in using VuFind with other integrated library systems would simply need to develop the Catalog Drivers.

Villanova a Tech Leader

Villanova University, located near Philadelphia, has earned a reputation for technology leadership. *PC Magazine* and *The Princeton Review* named Villanova University as the top in their "Top 20 Wired Colleges" for 2006. The Falvey Memorial Library, headed by University Librarian Joseph P. Lucia, has used Voyager since 1997 and implemented SFX in 2003. Andrew Nagy, the Technology Development Specialist for the Falvey Memorial Library, performed much of the development for VuFind.

Although in a nascent stage of development, VuFind enters the scene at a critical moment in the evolution of library technologies. As libraries become increasingly drawn to open source development and seek better alternatives than their current online catalogs, we can expect that many libraries will be interested in following, and even participating in, the evolution of this new library interface.

—Marshall Breeding

More Info. @:

VuFind demonstration website: http://www.vufind.org/

SourceForge source for VuFind: http://sourceforge.net/projects/vufind/

PC Magazine article about wired colleges: http://www.pcmag.com/article2/0,1895,2073661,00.asp

Thinking *Beside* the Box (The Red Box)

The other day I found myself standing beside a box—a Red Box video rental kiosk—thinking about thinking outside the box. If you have not yet encountered a Red Box Video Kiosk, you probably will soon. They are popping up in or near McDonald's restaurants, grocery stores, and other locations.

If you search Google for the phrase "think outside the box" you retrieve about 1.46 million webpages. If you search for the phrase "thinking outside the box" you retrieve a mere 900,000. For comparison purposes, a search on the phrase "Don't have a cow" retrieves 108,000 hits. It seems safe to conclude that "think outside the box" has become an oft-used phrase, perhaps even a cliche.

Thinking outside the box seems to involve getting a fresh perspective or stepping outside your own comfort zone in order to generate new ideas and become generally innovative. For decades business gurus have been exhorting their minions to think outside the box. For many people who use the phrase, thinking outside the box seems to be an unqualified good thing to do. By extension, it may be that "thinking inside the box" (only 160,000 hits in Google on that phrase, and—to complete the four corners of our mental box—only 95,600 hits on the phrase "think inside the box") is generally a bad practice. If only we all could think outside the box, the phrase seems to imply, the armada of earthly delights would drop anchor and unload all good into our lives.

As I stood beside that physical red box, pondering its meaning and their business model, it dawned on me that perhaps thinking outside the box and eschewing the old inside-the-box perspective is not an unqualified good thing to do. One potential downside to thinking outside the box is that, as soon as some individual gets outside the box and begins charging into the jungle of heretofore unthought thoughts, he or she inevitably blazes a trail. As others get outside the box, they tend to follow that trail. This is one way of describing how new ideas gather momentum and become all the rage.

The current raging ideas about delivering content such as movies, music, and books include such things as:

- Long tail: offer more content in greater variety than anybody could experience in lifetime. Collectively, your population of users will use it all, and they will make sufficient use of the "long tail" stuff to make it worth the cost of adding it to your content offerings.
- Digitize it (or keep it in digital format) and deliver it via computer networks: hard media (paper, microcards, CDs, DVDs, etc.) are passé.
- Place shifting: let them access that content from any place on the globe.
- Time shifting: let them access your content at any time of their choosing.

So how do we explain the success of Red Box Video Kiosks, which are so into being inside the box that they named their company after a box? This seems to be their response to the current "outside the box" ideas concerning retailing:

1. No long tail of content here. The online Red Box site (yes, Virginia, they have an online site) lists fewer than 100 titles available. Most of the actual boxes offer even fewer titles.

2. Hard media still have value, and Red Box even asks you to return the medium. You can return it to any Red Box box, however. Some Red Box employee must visit each physical box each week (on Tuesdays, evidently) to replenish the DVDs, add new releases, etc. Eventually the Red Box business model may evolve to the point that they are able to burn a DVD on demand from each box, thus greatly expanding the number of titles they can offer—assuming they want to be able to offer more titles. Also, if a DVD ever is developed that self-destructs after 24 hours without impeding legitimate use with onerous DRM, the day may come when the DVD need not be returned.

3. Place shifting: They ask their users to visit a Red Box location twice within a 24-hour period, first to pick up the DVD and second to return it. It is possible to order online to make sure a copy of your movie is reserved and waiting for you, but you still need to go pick it up.

4. Time shifting? Forget about it. For a buck, you have 24 hours to view the video. You can time shift all you want within that 24 hour period, but that's it. Forget the 7 part of 24/7.

Food and flicks seems to be their *modus operandi*, as it is for movie theaters and video rental outlets such as Blockbuster, but Red Box seems to have turned the equation on its head.

While theaters and Blockbuster basically lure consumers to their locations with the promise of a movie (or, in the case of Blockbuster, a video game), then try to sell you some food to go with the movie, Red Box is relying primarily on the lure of food (at McDonald's and grocery stores), then presenting the notion of renting 24-hour access to a DVD for a buck. The fact that McDonald's is a major stockholder in Red Box may have been a contributing cause to this reversed equation.

I often hear (and sometimes think myself): Why can't libraries be more like Google? Well, Google is a single for-profit company with an insane revenue stream and no bricks-and-mortar service points, while libraries are thousands of not-for-profit organizations with tens of thousands of bricks-and-mortar locations. Maybe the question we should be asking is: What can libraries learn from Red Box? Red Box seems to locate their small footprint, fully automated (other than that weekly visit from the Red Box elf, whom I have yet to catch in the act), limited title boxes in high traffic areas where people are in pursuit of one of the enduring essentials of life—food. Perhaps libraries could collaborate to offer a Blue Box or Carnegie Box kiosk service.

During my thinking about thinking outside the box, I found several websites that trace the origin of the phrase back to a graphic puzzle. Nine dots in three rows and three columns are presented to the user, with the instructions to draw four straight lines without lifting your pencil in such a way so that each of the nine dots is passed through only once. One way to solve this puzzle is to think outside the box.
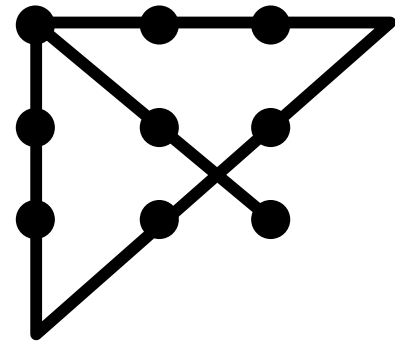
Sometimes market sectors—the DVD rental business and libraries are two instances that come to mind—become so enthralled by current trends in outside-the-box thinking that they forget all the valuable assets and good practices that are still available inside the box. Rather than thinking either inside or outside the box—and assuming there is an either/or relationship here—perhaps we should think *beside* the box, using the good, valuable ideas wherever we find them. —*Tom Peters*

More Info. @:
Red Box Website:
   http://www.redbox.com

# Big Games: The Third Coast for Gaming in Libraries?

Gaming in libraries is a hot topic. For some, it is a hot button issue. At the ALA TechSource Gaming, Learning, and Libraries Symposium in Chicago in July, speakers and attendees tended to identify two ways whereby some libraries are supporting the gaming interests of the populations they serve. The first is offering circulatable games. This includes not only computer games, but also traditional games (chess, cribbage) and board games (Sorry!, Clue—Get a). In my own mind, I often think of circulating games as the traditional East Coast of the gaming continent.

Other libraries are sponsoring in-library gaming events, competitions, and open play. Because these events can be a bit raucous and free-spirited, for some reason I think of in-library gaming events as the West Coast of the gaming continent, even though the Ann Arbor District Library in Michigan is one of the leading libraries in developing in-library gaming events.

At the Gaming Symposium Greg Trefry, a developer of computer games for GameLab, gave an interesting talk in which he suggested a third role—a Third Coast—that libraries might develop to support games: big games. Because these big games often occur in cities, they also are known as big urban games. Although many big games these days use high technology, such as portable GPS devices, a big game need not be high tech.

Trefry is one of the developers of the Come Out & Play Festival, which has been held in New York and Amsterdam. Here's how their website describes what they are about:

> The festival offers a chance to explore new styles of games and play. Last year the festival featured games from the creators of I love bees, PacManhattan, The Go Game, Conqwest, Big Urban Game and more. From massive multi-player scavenger hunts to public play performances, the festival gives players and the public the chance to take part in a variety of different games. Come
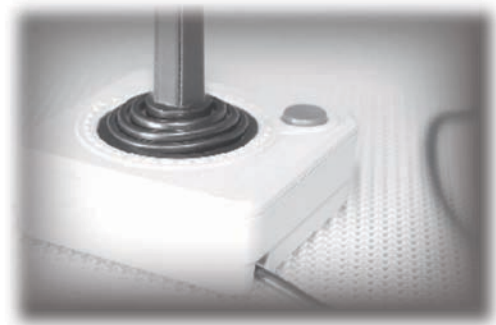
rediscover the city around you through play. Why street games? Why a street games festival, you ask? Fair questions. Well, we like innovative use of public space. We like games which make people interact in new ways. We like games that alter your perception of your surroundings. But most importantly, we think games are great way to have fun.

Trefry outlined several ideas for big urban games that would involve the library's building and collections. A secret agent scavenger hunt would have the participants use the library to collect codes and unique identifiers to solve some complex problem best solved through group effort. To hold down on the noise, the game could involve the need for participants to avoid detection by non-game players. In other words, they would need to act like normal library users as they played the game.

The Then/Now game would involve using the library to find an historic digital photograph in the library's collection, make a copy of the photo, then find the spot in the current urban landscape and take an updated photo that attempts to capture the same angle of the original photograph.

A third game concept Trefry outlined had the tentative title of Dewey's Demons and would involve collecting creatures that are generated by DDC numbers.

Several librarians I spoke with during and after the Symposium were intrigued by this third way of integrating gaming with libraries. Big games set in libraries would enable gamers to think about libraries and library collections as structured, built spaces that have links and roots back into the broader community.

If you are interested in reading more about gaming and learning, especially higher learning, in August Sharon Stoerger from the School of Library and Information Science at Indiana University posted an online, annotated bibliography of key books and journal articles on this topic. —*Tom Peters*

More Info. @:
ALA Gaming, Learning, & Libraries Symposium:
   http://gaming.techsource.ala.org/
Come Out & Play Festival Website:
   http://www.comeoutandplay.org/
Stoerger's Annotated Bibliography:
   http://ella.slis.indiana.edu/~sstoerge/virtualworlds.htm

Accessibility Initiatives in Second Life

Librarians, higher educators, and others have a lot to like about Second Life, the three-dimensional virtual world—and a lot to be concerned about. Several frequently mentioned downsides about Second Life are all the sex and gambling, and the lack of accessibility to the blind, visually impaired, physically challenged, and others. Linden Lab, the creators of Second Life, is working on the gambling part (perhaps also the sex), and several initiatives recently were announced that seek to address the accessibility challenges.

In August the National Science Foundation awarded approximately $90,000 to Eelke Folmer, an Assistant Professor in the Department of Computer Science & Engineering at the University of Nevada-Reno, to build an accessible interface to Second Life. Based on Folmer's website, the research and development project may include such things as a closed captioning service for Second Life and a voice-controlled client. This is scheduled to be a 12-month project, concluding in August 2008.

In September the iViNNiE Accessibility Center (IAC) on HealthInfo Island in the Alliance Information Archipelago officially opened in Second Life. It is receiving financial support from iViNNiE, a Florida-based company that aggregates news about virtual worlds such as Second Life. Additional financial support is being provided through a consumer health grant from the National Library of Medicine Greater Midwest Region. The Alliance Library System in Illinois is providing staff, admin-istrative support, and other in-kind contributions to this effort. One purpose of the IAC is to help educators, librarians, and other citizen-avatars better understand the resources—both in the real world and in virtual worlds—available to persons with disabilities. One goal of the IAC is to speed up the process by which we collectively understand and address the fundamental accessibility issues of virtual worlds.

Near the IAC virtual building is a related exhibit, designed and built by the National Physical Laboratory in the UK, that presents information about vision and color blindness. The Protanopia Room allows your avatar to experience protanopia, a form of colorblindness.

The Heron Sanctuary also has created a place on EduIsland 4 within the Alliance Info Archipelago. The group describes itself as "a community of support for all disabled people" that "offers members: information, companionship, a way to make a living and to contribute to the community, and a way to have fun." And they do have fun. Check out the Wheelies Nightclub on the Second Ability sim in Second Life.

The Heron Sanctuary held its grand opening on September 15-16, 2007. Gentle Heron, the avatar of one of the three founding members of the Heron Sanctuary, explained that, while social isolation is one of the main barriers persons with disabilities face in the real world, in a virtual world such as Second Life, many of those barriers disappear. Gentle Heron hopes that the disability community will connect better with the library community in Second Life. They also work in pairs and small groups to help disabled people new to Second Life become acclimated.

—*Tom Peters*

More Info. @:
Folmer's Website:
http://www.eelke.com/welcome.
html
Heron Sanctuary Website:
http://www.theheronsanctuary.info

Library of Congress to Preserve Games, Virtual Worlds

In August the Library of Congress announced a new $2.15 million program, Preserving Creative America (PCA), a collaborative effort that will develop preservation strategies, metadata standards, and best practices to help preserve aspects of computer games, virtual worlds such as Second Life, digital photography, and other digital media.

PCA is part of the broader NDIIPP (National Digital Information Infrastructure and Preservation Program) initiative, which launched in 2000. A total of eight awards were given:

- Academy of Motion Picture Arts and Sciences for the Digital Motion Picture Archive Framework Project.
- American Society of Media Photographers to expand and promote the use of the Universal Photographic Digital Imaging Guidelines.

- ARTstor, to create training and tools to help photographers submit archive-ready images to digital image repositories.
- BMS/Chace, to develop a standardized method for creating, gathering, and managing metadata for digitally recorded music.
- Stock Artists Alliance, to foster and facilitate the use of metadata for stock digital photographs.
- Universal Press Syndicate, to create and test a model for transferring digital version of cartoons to the Library of Congress. Garry Trudeau's Doonesbury and Pat Oliphant's editorial cartoons will serve as test cases.
- UCLA Film & Television Archive, to foster and facilitate awareness and education throughout the independent film community of the need for long-term sustainability of digital films.
- University of Illinois at Urbana-Champaign's Preserving Virtual Worlds project will explore methods for preserving digital games, interactive fiction, and sims in virtual worlds such as Second Life.

All of these initiatives are important, but the UIUC project may be especially interesting, because of the recent rapid growth and bright prospects for virtual worlds. According to the Library of Congress press release, UIUC's partners in the Second Life portion of their initiative include the University of Maryland, Stanford University, the Rochester Institute of Technology, and, of course, Linden Lab, the company behind Second Life.

According to a blog post by Henry Lowood, who is involved with preservation projects undertaken in conjunction with the "How They Got Game" project at the Stanford Humanities Lab, Stanford will conduct much of the preservation work with Second Life. The Second Life sims involved include Life to the Second Power, Democracy Island, and the International Spaceflight Museum. During a telephone conversation, Lowood stated that the project would begin on January 1, 2008.

—Tom Peters

More Info. @:
Library of Congress Press Release:
    http://www.loc.gov/today/pr/2007/07-156.html
NDIIPP Homepage:
    http://www.digitalpreservation.gov/
Henry Lowood's blog post:
    http://htgg2.stanford.edu/

New Management Team at SirsiDynix

Over the last few months, SirsiDynix, the largest company in the library automation arena, has been building a new team of executive management. When a company finds itself under new ownership, it is quite normal to see changes at the top. When Seaport Capital gained control of Sirsi, later SirsiDynix, as the original founders stepped aside, it put in place an executive management team that expanded the company five-fold over a seven-year period. Now under the ownership of Vista Equity Partners, a new roster of executives reigns at Sirsi-Dynix. In previous issues, Smart Libraries Newsletter covered the appointments of Keith Sturges as President of SirsiDynix International, Gary M. Rautenstrauch as Chief Executive Officer and Douglas

R. Maughan as Chief Financial Officer. Bill Davidson continues as Chief Sales Officer and Stephen Abram remains on board as Vice President for Innovation.

On July 30, SirsiDynix appointed Matthew Hawkins as its new Chief Operating Officer. Hawkins will take a major role in operational management of the company, assuming oversight of Client Care, which provides support services for all SirsiDynix customer libraries, as well as the units responsible for new customer implementations and for providing ongoing training and consulting services. Terry Jarnagin, VP of Client Care, and Mike Casale VP, Implementation, now report to Hawkins. Hawkins reports directly to Gary Rautenstrauch, the recently appointed Chief Executive Officer of SirsiDynix.

Hawkins comes to SirsiDynix with significant experience in software companies, but is a newcomer to the library automation field. Previous posts include vice president and general manager of the technology division Henry Schein, a firm that provides software, equipment, and related services to the healthcare industry, primarily to physicians in private practice. Hawkins also has held positions with McKinsey & Company, TenFold Corporation, and Electronic Data Systems.

As with other recently appointed SirsiDynix executives, Hawkins will work primarily from the company's offices in Provo, Utah. The Chief Operating Officer has been vacant since the February 2007 departure of Don McCall. The appointment of Hawkins completes the slate of "c-level" positions in this company, almost all of which have turned over since its acquisition by Vista Equity Partners. With this new executive management team in place, it will be of considerable interest to its library clients to observe how the company develops and executes new business strategies.

The December 2006 acquisition of SirsiDynix by Vista Equity Partners, the February 2007 departure of Patrick Somers and other top executives, and the March 2007 decision to consolidate on a single ILS platform marked a period of uncertainty in the industry toward SirsiDynix. Many existing and potential SirsiDynix library customers have postponed decisions regarding ILS migrations and procurements until the dust settles a bit. The next few months may serve as a barometer regarding the ability of SirsiDynix to sustain loyalty among its library clients, both those that rely on Unicorn and those still on the Dynix and Horizon platforms. —*Marshall Breeding*

More Info. @:
SirsiDynix Press Release:
http://www.sirsidynix.com/
Newsevents/Releases/2007/
20070730_hawkins.pdf

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